

FONTHAM, E.T.H., CORREA, P., WU-WILLIAMS, A., REYNOLDS, P., GREENBERG, R.S., BUFFLER, P.A., CHEN, V.W., BOYD, P., ALTERMAN, T., AUSTIN, D.F., LIFF, J., AND GREENBERG, S.D., "LUNG CANCER IN NONSMOKING WOMEN: A MULTICENTER CASE-CONTROL STUDY," CANCER EPIDEMIOLOGY, BIOMARKERS & PREVENTION 1: 35-43, 1992

This paper reports on an on-going multicenter case-control study. Nonsmoking female cases were defined as having never used any tobacco product. The study included 420 cases, 351 colon cancer controls, and 780 population controls. According to the authors, the study was "designed to minimize some of the methodological problems which have been of concern in previous studies of environmental tobacco smoke and lung cancer." The use of two control groups was intended to help in evaluating recall bias. In addition, histopathological review was conducted to confirm lung cancer cases and cell types; however, only 85% of the cases had complete histology. Finally, urinary cotinine was measured to investigate current tobacco use; however, cotinine analysis was completed for only slightly more than half of the cases. The authors suggested that their data "provide additional evidence in favor of a causal relationship between exposure to ETS and lung cancer in women who have never used tobacco themselves."

- Based on the index of ever having been exposed to spousal smoking during adulthood, an OR of 1.21 (95% CI 0.96-1.54) was presented. The numbers of cases and controls used in this analyses were not provided. Elsewhere, based on 264 cases, two spousal smoking risk estimates, neither statistically significant, were presented. They were 1.17 (95% CI 0.87-1.59) for colon cancer controls and 1.20 (95% CI 0.93-1.55) for population controls.
- The authors presented ORs for exposure during childhood to smoking by father or mother. None of the risk estimates was statistically significant. For father having smoked, the ORs were 0.91 (95% CI 0.67-1.24) for colon cancer controls and 0.82 (95% CI 0.64-1.07) for population controls, based on 196 cases. For mother ever having smoked, the ORs were 0.85 (95% CI 0.53-1.38) for colon cancer controls and 0.84 (95% CI 0.56-1.26) for population controls, based on 44 cases.
- The authors reported a statistically significant odds ratio of 1.34 (95% CI 1.03-1.73) for having reported occupational exposure to ETS. The numbers of cases and controls were not provided.
- A large number of subgroup analyses were conducted in this study; more than 65 ORs were presented.

The authors reported elevated ORs for adenocarcinoma, such as statistically significant ORs ranging from 1.38 to 1.60 for exposure during adulthood to spousal smoking, smoking by other household members, occupational exposure, and social exposure. However, these data are not consistent with the data of Stockwell, et al., for instance, who reported higher ORs for other cell types when compared to adenocarcinoma.